Prosumption, Produsage

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Prosumption and produsage present alternative conceptions of the involvement of end users, or consumers, in production processes, especially in digital and online media environments. While the term "prosumption" dates back at least to futurist Alvin Toffler's book *The Third Wave* (1980), both prosumption itself and similar concepts have risen to particular prominence again with the emergence of so-called "Web 2.0" platforms and technologies, which encourage the creation and sharing of user-generated content. Especially due to this association, these ideas have also been criticized for promoting business models that are based on the exploitation of unpaid, "precarious" user labor.

Prosumption: A brief history

The idea of prosumption was prefigured but not explicitly introduced in Toffler's 1970 book *Future Shock*, and explored in greater detail in *The Third Wave* (1980), which described individuals engaging in prosumption as "prosumers." Their emergence was envisaged as a consequence of the growing trend toward a customization and personalization of consumer products, which required increasingly significant input from consumers at the design and production stages; Toffler observed "a progressive blurring of the line that separates producer from consumer" (1980, p. 267), and foresaw a "customer-activated manufacturing system" (1980, p. 274). In later work he extended and concretized this description further, describing customers as "contributing not just the money but market and design information vital for the production process. Buyer and supplier share data, information, and knowledge" (1990, p. 239).

The "pro-" in "prosumer" can therefore be understood as describing both a professional and a productive consumer. First, consumers wishing to contribute to the design and production process as prosumers may be required to invest quasi-professional degrees of knowledge, time, and money in order to contribute meaningfully to the design and production of new consumer goods; they may represent high-end consumers or "pro-ams" (professional-amateurs) (Leadbeater & Miller, 2004). Second, in contributing as prosumers they make a productive contribution to industrial and commercial processes.

Although such early conceptions of prosumption focused largely on the prosumer-supported development and production of consumer goods in physical form, since the late 20th century there has been a substantial shift toward applying such concepts

especially to content production and consumption in digital and online media. This shift was driven initially by the popularization of "Web 2.0" (O'Reilly, 2005) as a catchall term to describe a new wave of Web-based platforms and services that allowed for greater user customization, interactivity, and participation; prosumption was also promoted as one approach to describing the evidently successful nontraditional content-production models employed in projects such as the open-source operating system Linux or the collaboratively edited Wikipedia.

As Internet studies and related disciplines began to develop their critiques of these and other practices, prosumption became a framework that was widely used in scholarly debates about the practicability, sustainability, and ethical and intellectual property implications of utilizing voluntary user labor in often commercial contexts. Since the turn of the millennium, there have been a large number of works that variously celebrate, critique, or provide alternatives to the idea of prosumption, leading Ritzer, Dean, and Jurgenson to summarize this substantial increase in scholarly uses of the term as "the coming of age of the prosumer" in a widely recognized special issue of *American Behavioral Scientist* (2012a, p. 379).

The popularization of the term "prosumption" has also broadened and blurred its definition, however. In an online context, "prosumption" is at times used simply as a synonym for user-led content creation, without specific reference to Toffler and other scholars who employ more specific (and occasionally conflicting) definitions for the term. Partly in order to address such slippage, several researchers have proposed alternative terms to describe prosumption and related phenomena; in doing so, they also depart to some extent from a Tofflerian model of prosumption, which continues to employ relatively stable categories of (corporate) producer and (private) consumer.

In *The Wealth of Networks*, Yochai Benkler (2006) avoids "prosumption" altogether and instead introduces the term "commons-based peer production" to examine "nonmarket and radically decentralized" production models that exist in a "networked information economy" (2006, p. 3). He specifically highlights the ability of individuals to use modern many-to-many communications networks (chiefly, the Internet) to organize and collaborate on joint projects that exist outside of commercial and industrial frameworks and utilize nonproprietary, commons-based approaches to the ownership of their shared intellectual property. Such projects are able to generate genuine economic value, and draw on the ability of the consumers of informational products to become productive contributors to the collaborative effort, but they no longer necessarily require the presence of corporations as frameworks necessary for the organization and exploitation of participant labor.

Produsage: An alternative model

By contrast, Bruns (2008) introduces the concept of produsage as an explicit alternative to prosumption. The construction of this portmanteau from "production" and "usage" is designed to emphasize the inherent role of potential participants in produsage as active users of content and information (rather than merely as passive consumers), and

research into produsage is focused in the first place on identifying from the available evidence the key preconditions that must be met if produsage projects are to be successful.

Produsage theory identifies four key principles defining successful projects that develop and maintain community-based efforts to collaboratively develop informational content, and explores the extent to which such principles can be maintained even if there is a corporate embrace of produsage projects and communities. First, it postulates that produsage processes must extend an open invitation to their users to become active producers, independent of their prior track record of participation or their formal qualifications and expertise in the area. The contributions made by this produser community are then communally evaluated by community members themselves, who use a range of formal and informal mechanisms developed by the community for highlighting constructive contributions while discarding inappropriate contributions or reverting them to an earlier state.

Second, this communal process of participation and evaluation informs and drives the development of a fluid project leadership structure that takes the shape of a multi-headed heterarchy rather than that of a conventional hierarchy. Produsage participants gain status within the community on the basis of their contributions, and such status waxes and wanes as their activities change; this results in a meritocracy in which status is conferred ad hoc and pro tempore rather than enshrined in long-term organizational structures.

Such communal, commons-based structures also affect the style and form of the content that the community generates through its collaborative produsage efforts. Third, therefore, produsage theory suggests that these efforts constitute an indefinitely continuing process of incremental content development and improvement rather than a series of clearly delimited projects; along the way, these ongoing processes generate temporary artifacts that necessarily remain unfinished, but represent the current state of the art and are usually sufficient for end users. This translates the idea of the "perpetual beta" in software development—software that is sufficiently developed to be used with confidence, but whose development continues—to other areas of collaborative content creation.

Finally, the continuing development of such content through commons-based produsage activities also requires the adoption of comparatively new models of intellectual property. Produced content must be formally recognized as the common property of the community involved in creating it, at least to the extent that such common ownership is necessary to enable the further development and revision of such content by other producers. In practice, this is often achieved through the adoption of Creative Commons or similar content licenses that explicitly permit at least the noncommercial use and revision of such content by other community members, while requiring the continued attribution of all previous contributors as cocreators. This attribution, then, also ensures that individual contributors may at least indirectly derive certain rewards from their efforts as producers: for example, by showcasing and commercially exploiting their expertise in a specific field of produsage activity.

Applications and critiques

As noted, the revival of prosumption theory, and the creation of produsage as an alternative concept, are strongly related to the emergence of "Web 2.0" and the gradual shift toward a knowledge-based economy in many developed nations. The greater emphasis on intellectual rather than physical production, and on the circulation of intangible rather than tangible goods—of "content"—as well as the growing availability of the technologies that enable access to and participation in such productive activities, have provided the environment in which a growing number of people are at least in principle able to participate in prosumption or produsage activities, even though not all of them choose to take up such opportunities.

Widely cited examples for this trend include the emergence of open-source software, as well as of the collaboratively edited encyclopedia Wikipedia. Such projects have managed both to attract a wide range of contributors and to generate outputs that are widely recognized by everyday users—almost 50 percent of Web servers today use the open-source software Apache, for example (Netcraft, 2014), while Wikipedia is among the top 10 most accessed Web sites in the world (Alexa, 2014). Both projects extend an open invitation to users to become active contributors to their shared efforts, and provide the opportunity for proven contributors to take on leadership roles over time; both also generate a steady stream of content updates (seamlessly so, in the case of Wikipedia) and make their collaboratively created content freely available under open content license arrangements.

Less transparently, other major online phenomena may also be considered as drawing on prosumption or produsage principles. Search engines such as Google and recommendation systems such as Amazon, for example, base their results substantially on the activities of previous users: for Google, the interlinkages created by anyone posting Web content, as well as their search activities on the site; for Amazon, the search, review, and purchase activities of customers. In carrying out their activities, the users of these sites thus contribute to the further enhancement of these systems and of the results produced by them, without necessarily being aware of this fact. While this may not meet the definition of produsage as outlined by Bruns (2008), it can be seen as an example of prosumption in its original Tofflerian sense.

This has given rise to critiques of such a harnessing of user labor as a form of unpaid exploitation (e.g., Fuchs, 2010), and indeed could be regarded as a particularly insidious form of such exploitation since the exploited user is not even aware of being exploited. (Alternatively, the fact that sites such as Google provide a free search engine service in return for their users' free labor may also be seen as constituting a fair if unspoken bargain between both parties.) More specifically, where commercial entities are explicitly seeking user involvement as content creators in pursuit of their corporate goals, without offering more than a vague promise of potential remuneration at a later point, such harnessing of user contributions has been described as "precarious labour" (Banks & Deuze, 2009). However, the extent to which prosumption or produsage activities are exploitative of user labor is likely to depend on project-specific circumstances; neither model can or should be dismissed summarily as inherently exploitative.

SEE ALSO: Collaboration and Cooperation; Community; Computer-Supported Cooperative Work (CSCW); Information Society; Intellectual Property Rights; Network Society; Peer-to-Peer Interaction; User-Generated Content

References and further readings

Alexa. (2014). *The top 500 sites on the Web*. Retrieved November 27, 2015 from http://www.alexa.com/topsites

Banks, J. A., & Deuze, M. (2009). Co-creative labour. *International Journal of Cultural Studies*, *12*(5), 419–431.

Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. New Haven, CT: Yale University Press.

Bruns, A. (2008). *Blogs, Wikipedia, Second Life, and beyond: From production to produsage*. New York, NY: Peter Lang.

Fuchs, C. (2010). Class, knowledge and new media. *Media, Culture & Society*, *32*(1), 141–150.

Leadbeater, C., & Miller, P. (2004). *The pro-am revolution: How enthusiasts are changing our economy and society*. London, UK: Demos.

Netcraft. (2014, August 27). *August 2014 Web server survey*. Retrieved November 27, 2015 from http://news.netcraft.com/archives/2014/08/27/august-2014-web-server-survey.html

O'Reilly, T. (2005, September 30). *What is Web 2.0?* Retrieved November 27, 2015 from http://oreilly.com/web2/archive/what-is-web-20.html

Ritzer, G., Dean, P., & Jurgenson, N. (2012a). The coming of age of the prosumer. *American Behavioral Scientist*, *56*(4), 379–398. doi: 10.1177/0002764211429368

Ritzer, G., Dean, P., & Jurgenson, N. (Eds.). (2012b). *The coming of age of prosumption and the prosumer* [Special issue]. *American Behavioral Scientist*, *56*(4).

Toffler, A. (1970). *Future shock*. New York, NY: Random House.

Toffler, A. (1980). *The third wave*. New York, NY: Bantam.

Toffler, A. (1990). *Powershift: Knowledge, wealth, and violence at the edge of the 21st century*. New York, NY: Bantam.

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